



UNITED STATES PATENT AND TRADEMARK OFFICE

Tr

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/806,332

03/23/2004

Kazumi Hayasaka

1075.1256

1760

21171

7590

08/08/2006

STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

MARTINEZ, DAVID E

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,332

Applicant(s)

HAYASAKA, KAZUMI

Examiner

David E. Martinez

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 2,3,5-8,10,11 and 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Fritz Fleming
FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
8/4/2006

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 1, in line 3, the term "data to be transferred to the outside" renders the claim indefinite. It is not clear what exact location this "outside" is referring to. Does it mean outside of the terminal? Or outside of the first processing section? Furthermore, in lines 6-7, the term "transferring the transfer data" is also indefinite since it is not clear as to where this transfer data is being transferred to or from. Is it being transferred from the first processing section to the second processing section or from the first processing section to some other unmentioned element? Finally, in line 15, the term "in advance" also renders the claim indefinite since it's not clear what there term is relative to. Does it mean to store in advance of receiving the second transfer data or does it mean storing in advance of some other event?

With regards to claim 9, in line 9, the term "in advance" also suffers from the deficiencies discussed in claim 1 above and thus is rejected under the same rationale.

With regards to claims 2-8 and 10-16, due to their dependency to claims 1 and 9 respectively, they suffer from the same deficiencies and are rejected under the same rationale.

Due to the vagueness and a lack of clear definiteness in the claims, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 9 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application No. US 2003/0147411 A11 to Goosman.

1. With regards to claim 1, Goosman teaches . An information processing terminal, comprising:

a first processing section for producing transfer data to be transferred to the outside [paragraphs 21-22] and a data transfer descriptor for requesting transfer of the transfer data [paragraphs 22-23, the header contains a descriptor request for requesting another data packet that is ready to be sent]; and

a second processing section for transferring the transfer data produced by said first processing section in accordance with the data transfer descriptor received from said first processing section [paragraphs 21-22];

said second processing section including:

a buffer capable of temporarily storing the transfer data [paragraphs 21-22, the data packets must be held in some kind of memory buffer];

a merging section capable of merging first transfer data produced by said first processing section and stored in advance in said buffer and second transfer data produced separately from the first transfer data by said first processing section [paragraphs 21-22, a

Art Unit: 2181

header is attached (merged) to the concatenated packets thus some section is performing that operation]; and

a controlling section for controlling said merging section to merge the first and second transfer data in accordance with the data transfer descriptor received from said first processing section and performing transfer control of the merged transfer data [paragraphs 21-22, a control section controls the merging of the data packets with a header depending if data packets were sent individually or as a concatenated data packet].

2. With regards to claim 4, Goosman teaches the information processing terminal as claimed in claim 1, wherein the first transfer data is main data to be transferred to the outside, and the second transfer data is a header part including information of a transfer destination of the main data and to be added to the main data [paragraphs 21-22, header information within a network packet always contains transfer destination information for its payload].

3. With regards to claim 9, it falls within the same scope as claim 1 above and thus is rejected under the same rationale.

4. With regards to claim 12, it's of the same scope as claim 4 above and thus is rejected under the same rationale.

Allowable Subject Matter

Claims 2-3,5-8,10-11 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In claim 2, the prior art of record, alone or in combination fails to teach or fairly suggest: said first processing section describes, in the data transfer descriptor to be produced to request transfer of the second transfer data to said second processing section, information of a storage

Art Unit: 2181

source of the second transfer data and describes merge instruction information for instruction to merge the first and second transfer data, and then notifies said second processing section of the data transfer descriptor.

In claim 5, the prior art of record, alone or in combination fails to teach or fairly suggest: where the same main data is to be transferred to a plurality of transfer destinations, said first processing section produces and writes, for each of the transfer destinations, the main data as the first transfer data into said buffer, and produces the header part as the second transfer data including the information of the transfer destination and to be added to the main data and the data transfer descriptor for requesting the merging of the header part and the main data and the transfer of the merged data and notifies said second processing section of the data transfer descriptor.

In claim 6, the prior art of record, alone or in combination fails to teach or fairly suggest: said first processing section produces a buffer writing descriptor for requesting writing of the first transfer data into said buffer to said second processing section and notifies said second processing section of the buffer writing descriptor, and, in said second processing section, said controlling section reads out and writes the first transfer data into said buffer in accordance with the buffer writing descriptor received from said first processing section.

In claim 10, the prior art of record, alone or in combination fails to teach or fairly suggest: a notification of a data transfer descriptor in which information of a storage source of the second transfer data and merging instruction information for instruction for merging of the first and second transfer data are described is issued as the data transfer descriptor from said processing section.

In claim 13, the prior art of record, alone or in combination fails to teach or fairly suggest: in order to transfer the same main data to a plurality of transfer destinations, the main data

Art Unit: 2181

produced by said processing section is written as the first transfer data into said buffer, and a notification of a data transfer descriptor for requesting merging of the header part as the second transfer data produced for each of the transfer destinations by said processing section with the main data and transferring of the merged data is received from said processing section.

In claim 14, the prior art of record, alone or in combination fails to teach or fairly suggest: a notification of a buffer writing descriptor for requesting writing of the first transfer data into said buffer is received from said processing section, and said controlling section reads out and writes the first transfer data in to said buffer in accordance with the buffer writing descriptor received from said processing section.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,136,582 to Firoozmand teaches first transfer data (data), second transfer data (header data), and a descriptor ring which maintains the synchronization between headers and data

US Patent Application Publication No. US 2006/0039374 A1 to Belz et al. teaches in Fig 16, paragraph 183, a mergin section that combines headers and data payloads into packets.

US Patent No. 6,708,233 to Fuller et al. teaches descriptors instruction a DMA engine how to separate payload and header data into two separate buffers.

US Patent Application Publication No. US 2005/0129031 A1 to Robotham et al. teches reassembly of a header and payload – paragraph 32.

Douglas E. Comer, "Internetworking with TCP/IP", 2000, Prentice Hall, 4th Ed, Volume 1, pages 97-98 discloses a packet headed containing transfer information (source and destination addresses).

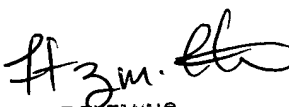
Art Unit: 2181

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 272-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz M. Fleming can be reached on 571-272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEM


FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
8/4/2006